Brigham Research Assay Core (BRAC) 221 Longwood Avenue Boston, MA 02115 Director: Gordon Williams, MD

25-hydroxyvitamin D3 and D2, Serum

Method:	Liquid Chromatography-Tandem Mass Spectrometry (LC/MS/MS)
Description:	25-hydroxyvitamin D3 and D2 in human serum is extracted by Solid Phase Extraction (SPE), and eluted by High Performance of Liquid Chromatography (HPLC). The determination is done by Mass Spectrometry (MS) in Electrospray Ionization (ESI) source Deuterated stable isotope is utilized as for the calibration of assay.

Collection and Performance Characteristics

Tube type:	Preferred: SST Alternate:
Minimum Volume:	0.3 mL
Lowest Reportable Value:	1ng/mL
Dynamic Range:	1-100ng/mL (25-hydroxyvitamin D2 or D3)
Precision:	Intra-assay variation is <5% RSD Inter-assay variation is <8% RSD
Reference Range:	30-74 ng/mL